

REMARKS

This is in response to the final Office Action mailed on July 6, 2006, in which claims 1, 6, 7, 13, 17-19, and 24 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Priebe et al. (U.S. Pat. App. Pub. 2003/0075566) in view of Ueda et al. (U.S. Pat. No. 4,398,652); claims 17-19 and 24 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Osgar (U.S. Pat. No. 5,526,956) in view of Ueda et al.; claims 1, 2, 4-7, 14, 16-20, and 22-24 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Qutub (U.S. Pat. No. 5,601,066) in view of Zoder (U.S. Pat. No. 2,240,277), and further in view of Ueda et al.; claims 8-12 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Priebe et al. in view of Osgar et al. (U.S. Pat. No. 5,875,921), and further in view of Ueda et al.; and claims 1 and 13 were provisionally rejected on the ground of non-statutory obviousness-type double patenting as being unpatentable over claims 1 and 8 of copending Application No. 10/247,107 in view of Osgar '921 and further in view of Ueda et al. With this Amendment, claims 1, 14, and 17 are amended. Claims 1-24 remain pending in the present application.

Claim Rejections - 35 U.S.C. § 103**Priebe et al. in view of Ueda et al.**

Claims 1, 6, 7, 13, 17-19, and 24 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Priebe et al. in view of Ueda et al. To establish prima facie obviousness there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference. *In re Kotzab*, 217 F.3d 1365, 55 USPQ2d 1313 (Fed. Cir. 2000); MPEP 2143.01. With this Amendment, amendments of form are made to claims 1 and 17. Amended claim 1 recites a liquid dispensing and recirculating system comprising a container, a connector including a probe having a flow passage therein, and a pump coupled with the probe for pumping fluid in the container through the probe. The system also includes "a fluid return channel extending longitudinally along an exterior of the probe adapted to return recirculated fluid to the fluid in the container such that air in the fluid is released above the fluid in the container to prevent injection of air into the fluid in the container." Amended claim 17

recites a method of dispensing and recirculating liquids comprising coupling a connector including a probe that defines "a fluid passage" and "a fluid return channel extending longitudinally along an exterior of the probe," dispensing fluid from the container through the fluid passage, and refilling fluid into the container through the fluid return channel such that air in the fluid is released above the fluid in the container to prevent injection of air into the fluid in the container. The Office Action states that Priebe et al. fail to teach "a fluid return channel extending longitudinally along an exterior of the probe" as defined by claims 1 and 17. Office Action, page 4. The Office Action supplied this deficiency in Priebe et al. by turning to the disclosure of Ueda et al. However, this combination is not a proper one.

Ueda et al. teach a spout-like dispenser (FIGS. 8-10B) including a coupling portion A, a spout portion B, and an air passage portion C which admits air into the container to facilitate the discharge of beer. Col. 6, lines 39-43. A main stream of beer 14 flows from main pouring port 1 and a subsidiary stream of beer 15 is discharged from subsidiary pouring port 2. Col. 7, lines 17-58. The air passage portion C comprises a tube 11 which is made long enough to extend into the container. Col. 8, lines 58-61. A semicircular groove 13 is made to align with, and partly equal in shape to, the passage of tube 11. As shown in FIG. 10A, tube 11 and semicircular groove 13 serve to let air pass into the container and facilitate the discharge of beer and to allow beer that flows through tube 11 to be led to main pouring port 1. Col. 8, lines 62-63; col. 9, lines 8-20.

As described in Priebe et al. (and as pointed out on page 4 of the Office Action), one of the goals of the system in Priebe et al. is to allow the re-circulated liquid to "smoothly flow down the dip tube 50 into the vessel 42" to cause "much less liquid turbulence and formation of air bubbles in the liquid." Paragraph [0062]. Ueda et al. teach a pouring spout that includes a semicircular groove 13 connected to a tube 11 via an air intake port to allow air into the fluid in the container to facilitate the flow of beer from the container. In other words, the pouring spout as taught by Ueda et al. injects air into the fluid in the container via semicircular groove 13 and tube 11 (see FIG. 10A) to allow the fluid to flow from the container. Thus, combining the pouring spout of Ueda et al. with the recirculating probe of Priebe et al. would result in a significant increase in liquid turbulence and the

formation of air bubbles within the fluid in the container, thereby rendering the system in Priebe et al. unsatisfactory for reducing liquid turbulence or preventing the formation of air bubbles in the liquid. If the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. MPEP 2143.01; *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).

Therefore, because there is no suggestion or motivation in Priebe et al., Ueda et al., or in knowledge generally available to one of ordinary skill in the art to provide a fluid return channel extending longitudinally along an exterior of the probe for returning recirculated fluid to the fluid in the container such that air in the fluid is released above the fluid in the container *to prevent injection of air into the fluid in the container* as provided in claims 1 and 17, these claims are allowable and favorable reconsideration is respectfully requested.

Claims 6, 7, 13, 18, 19, and 24 were also rejected under 35 U.S.C. §103(a) as being unpatentable over Priebe et al. in view of Ueda et al. As discussed above, claims 1 and 17 are in a condition for allowance. Claims 6, 7, and 13 depend from allowable claim 1, and claims 18, 19, and 24 depend from allowable claim 17, and as such are allowable with their respective independent base claims. In addition, it is respectfully submitted that the combinations of features recited in claims 6, 7, 13, 18, 19, and 24 are patentable on their own merits, although this does not need to be specifically addressed herein since any claim depending from a patentable independent claim is also patentable. See MPEP 2143.03, citing *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988).

Osgar '956 in view of Ueda et al.

Claims 17-19 and 24 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Osgar '956 in view of Ueda et al. To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. MPEP 2143.03; *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). Claim 17 recites a method of dispensing and recirculating liquids comprising providing a container, coupling a connector to the container including a probe defining a fluid passage terminating within the interior of the container at a tip of

the probe and defining a fluid return channel extending longitudinally along an exterior of the probe, dispensing fluid from the container through the fluid passage, and refilling fluid into the container through the fluid return channel such that air in the fluid is released above the fluid in the container to prevent injection of air into the fluid in the container. The Office Action states that Osgar '956 fails to teach coupling a connector including a probe that defines "a fluid return channel extending longitudinally along an exterior of the probe" as recited by claim 17. Office Action, page 6. The Office Action supplied this deficiency in Osgar '956 by turning to the disclosure of Ueda et al. However, Ueda et al. do not supply this deficiency.

Osgar '956 discloses a liquid chemical dispensing and recirculating system 10 including container 12 and dispenser 14. Dispenser 14 is mounted on container 12 to dispense and recirculate liquid chemicals within container 12. Liquid chemical is withdrawn from container 12 through flow passage 43 of dip tube 26 and flow passage 58 defined by probe 50. After the dispensed liquid chemical is either filtered and/or tested for impurities, dispensed liquid is refilled or recirculated through flow passage 60 within recirculation port 54 and probe 50 and through fluid passage 44 which is circumferentially positioned around fluid passage 43. Col. 5, lines 3-50. As stated in the Office Action, air releases up through the fluid after the fluid enters the container through flow passage 60. Office Action, page 5. In other words, the flow passage 60 does not "prevent injection of air into the fluid in the container," as is required by claim 17.

Ueda et al. do not supply this deficiency. As described above, Ueda et al. teach a spout-like dispenser (FIGS. 8-10B) including a coupling portion A, a spout portion B, and an air passage portion C which admits air into the container to facilitate the discharge of beer. The air passage portion C comprises a tube 11 which is made long enough to extend into the container. Col. 8, lines 58-61. A semicircular groove 13 is made to align with, and partly equal in shape to, the passage of tube 11 to allow beer that flows through tube 11 to be led to main pouring port 1. Col. 9, lines 8-20. As shown in FIG. 10A, tube 11 and semicircular groove 13 serve to let air pass into the container and facilitate the discharge of beer. Col. 8, lines 62-63. In other words, Ueda et al. injects air into the fluid in the container to allow the fluid to flow from the container, and does not "prevent

injection of air into the fluid in the container,” as is required by claim 17. Therefore, because the recited elements of claim 17 are not taught or suggested by Osgar ‘956 or Ueda et al., the rejection of claim 17 under 35 U.S.C. § 103(a) should be withdrawn.

Claims 18, 19, and 24 were also rejected under 35 U.S.C. §103(a) as being unpatentable over Osgar ‘956 in view of Ueda et al. As discussed above, claim 18 is now in a condition for allowance. Claims 18, 19, and 24 depend from claim 17, and as such are allowable with their respective independent base claims. In addition, it is respectfully submitted that the combinations of features recited in claims 18, 19, and 24 are patentable on their own merits, although this does not need to be specifically addressed herein since any claim depending from a patentable independent claim is also patentable. See MPEP 2143.03, citing *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988).

Qutub in view of Zoder and further in view of Ueda et al.

Claims 1, 2, 4-7, 14, 16-20, and 22-24 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Qutub in view of Zoder and further in view of Ueda et al. With this Amendment, claim 14 is amended. Claim 1 recites a liquid dispensing and recirculating system comprising a container, a connector including a probe having a flow passage therein, and a pump coupled with the probe for pumping fluid in the container through the probe. The system also includes “a fluid return channel extending longitudinally along an exterior of the probe for returning recirculated fluid to the fluid in the container such that air in the fluid is released above the fluid in the container to prevent injection of air into the fluid in the container.” Amended claim 14 recites a probe for dispensing liquid from and returning liquid to a container comprising a flow passage, a fluid return port, and a fluid return channel in fluid communication with the fluid return port via a bore, the fluid return channel extending longitudinally along an exterior of the probe. The fluid return channel returns the liquid to liquid in the container such that air in the liquid is released above the liquid in the container to prevent injection of air into the liquid in the container. Claim 17 recites a method of dispensing and recirculating liquids comprising defining a fluid return channel extending longitudinally along an exterior of the probe, dispensing fluid from the container through

the fluid passage, and refilling fluid into the container through the fluid return channel such that air in the fluid is released above the fluid in the container to prevent injection of air into the fluid in the container.

Qutub discloses a fuel system having a fuel warming subsystem including fuel warming conduit 42 connected to the fuel warming return inlet 40 to act as a heat exchanger. Fuel warming conduit 42 is a relatively large diameter straight tube that surrounds the substantial length of the straight, relatively small diameter suction tube 38. Fuel warming conduit 42 defines a warm fuel return path 43 between the suction tube 38 and the fuel warming conduit 42. Col. 5, lines 55-60.

In other words, warm fuel return path 43 is fully contained within the interior of fuel warming conduit 42. As described in the present application, conventional fluid recirculation systems including enclosed flow paths for returning fluid back to a container trap pockets of air contained in the return flow path, causing air to be injected into the fluid contained in the vessel as it is returned to the container. Thus, Qutub does not "prevent injection of air into the fluid in the container," as is required by claims 1, 14, and 17. Zoder was relied upon for supplying a cap and a pump, but does not include a recirculation path, and thus does not supply the deficiency of Qutub. The Office Action refers to col. 4, lines 32-35 as disclosing a recirculating system. However, this cited passage only discloses the use of suction line 99 to draw gasoline from tank 1, but does not disclose recirculating the gasoline back to the tank.

Furthermore, Ueda et al. do not supply this deficiencies of Qutub and Zoder. As described above, Ueda et al. teach a spout-like dispenser (FIGS. 8-10B) including a coupling portion A, a spout portion B, and an air passage portion C which admits air into the container to facilitate the discharge of beer. The air passage portion C comprises a tube 11 which is made long enough to extend into the container. Col. 8, lines 58-61. A semicircular groove 13 is made to align with, and partly equal in shape to, the passage of tube 11 to allow beer that flows through tube 11 to be led to main pouring port 1. Col. 9, lines 8-20. As shown in FIG. 10A, tube 11 and semicircular groove 13 serve to let air pass into the container and facilitate the discharge of beer. Col. 8, lines 62-63. In other words, Ueda et al. injects air into the fluid in the container to allow the fluid to flow from the

container, and does not “prevent injection of air into the fluid in the container,” as is required by claims 1, 14, and 17.

Therefore, because the recited elements of claims 1, 14, and 17 are not taught or suggested by Qutub, Zoder, or Ueda et al., the rejection of claims 1, 14, and 17 under 35 U.S.C. § 103(a) should be withdrawn.

Claims 2, 4-7, 16, 18-20, and 22-24 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Qutub in view of Zoder and further in view of Ueda et al., and claims 8-12 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Priebe et al. in view of Osgar ‘921 and further in view of Ueda et al. As discussed above, claims 1, 14, and 17 are now in a condition for allowance. Claims 2 and 4-12 depend from allowable claim 1, claim 16 depends from allowable claim 14, and claims 18-20 and 22-24 depend from allowable claim 17, and as such are allowable with their respective independent base claims. In addition, it is respectfully submitted that the combinations of features recited in claims 2, 4-7, 16, 18-20, and 22-24 are patentable on their own merits, although this does not need to be specifically addressed herein since any claim depending from a patentable independent claim is also patentable. See MPEP 2143.03, citing *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988).

Double Patenting

Claims 1 and 13 were provisionally rejected on the ground of non-statutory obviousness-type double patenting as being unpatentable over claims 1 and 8 of copending Application No. 10/247,107 in view of Osgar ‘921 and further in view of Ueda et al. The Office Action states that Application No. 10/247,107 and Osgar ‘956 fail to teach “a fluid return channel extending longitudinally along an exterior of the probe.” Office Action, page 13. The Office Action supplied this deficiency in Application No. 10/247,107 and Osgar ‘956 by turning to the disclosure of Ueda et al. However, Ueda et al. do not supply this deficiency. As described above, tube 11 and semicircular groove 13 (FIG. 10A) serve to let air pass into the container and facilitate the discharge of beer. Col. 8, lines 62-63. In other words, Ueda et al. injects air into the fluid in the container to allow the fluid to flow from the container, and does not “prevent injection of air into the fluid in the

container,” as is required by claim 1. Thus, the claims currently pending are not merely obvious variations of claims 1 and 8 of copending Application No. 10/247,107 in view of Osgar ‘921 and further in view of Ueda et al., and the double patenting rejection on this basis should accordingly be withdrawn.

Withdrawn Claims

Claims 3, 15, and 21 were previously withdrawn from consideration as being drawn to a non-elected species. Claim 3 depends from allowable independent claim 1, claim 15 depends from allowable claim 14, and claim 21 depends from allowable claim 17. Thus, claim 3, 15, and 21 should also be considered and allowed, since they depend from an allowable generic independent claim. See MPEP 809.02 and 37 C.F.R. 1.146.


CONCLUSION

In view of the foregoing, it is believed that all claims in the present application are in condition for allowance. Reconsideration and allowance of claims 1, 2, 4-14, 16-20, and 22-24 are respectfully requested. In addition, claims 3, 15, and 21 should also be considered and allowed, since they depend from allowable generic independent claim 11. A Notice of Allowance with respect to all claims 1-24 is respectfully requested.

Respectfully submitted,

KINNEY & LANGE, P.A.

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By: 
Paul G. Koziol, Reg. No. 58,515
THE KINNEY & LANGE BUILDING
312 South Third Street
Minneapolis, MN 55415-1002
Telephone: (612) 339-1863
Fax: (612) 339-6580

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